#### U.S. Department of Agriculture, Agricultural Research Service

### Systematic Mycology and Microbiology Laboratory - Nomenclature Fact Sheets

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## Septoria oenanthes

## **Host Range and Geographic Distribution**

Septoria oenanthes Ellis & Everh. has been reported on *Oenanthe sarmentosa* in Washington, USA (Ellis & Everhart 1894) and British Columbia, Canada (Savile 1965); *Oenanthe crocata* in the UK (Grove 1935) and Portugal (de Sousa Dias et al. 1982); and *Oenanthe aquatica* in the former USSR (Teterevnikova-Babayan 1987) and Czechoslovakia (Picbauer 1937, as *Septoria oenanthis* Picb.).It has also been reported under the invalid name "Septoria oenanthis-stoloniferae" Sawada on *Oenanthe stolonifera* in Taiwan.

### **Nomenclature and Taxonomy**

This leaf spot of *Oenanthe* spp. was initially described as a new species by Ellis & Everhart in 1894 as *Septoria oenanthis*, with spelling later corrected to *Septoria oenanthes*. The type specimen is on leaves of *Oenanthe sarmentosa* collected from Seattle, Washington, USA in 1892.

Petrak's List (Vol. 8 p. 102) reported publication of the illegitimate later homonym *Septoria oenanthis* Picbauer 1937, on *Oenanthe aquatica* in Czechoslovakia. Picbauer's publication is not in the SBML library, therefore I could not confirm whether this name was validly published. *Septoria oenanthis* Picbauer has received little attention in the literature; Brandenburger (1985) listed it as a possible synonym of *Septoria oenanthes* Ellis & Everh.

In 1943 Sawada provided a Japanese description of a leaf spot on *Oenanthe stolonifera*, proposing the name *Septoria oenanthis-stoloniferae*. As Sawada (1943) did not provide a Latin description, this must be treated as an invalid name (Art. 36.1). The conidial dimensions from Sawada's description, 29-39 x 2μm, appear to be consistent with *Septoria oenanthes*, with conidia described by Ellis & Everhart as 20-35 x 1.5-2 μm.

Shin & Sameva (1999, 2004) identified isolates from *Oenanthe javanica* in Korea as *Septoria oenanthes* Ellis & Everh. (Shin & Sameva 1999, Shin & Sameva 2004) but reported that the conidia were longer, at 29-61 x 1.8-2.7 µm, than the dimensions reported by Ellis & Everhart (1894). Ellis & Everhart (1894) did not report conidial septation, and European isolates on *Oenanthe crocata* (Grove 1935, de Sousa Dias et al. 1982) and North American isolates on *Oenanthe sarmentosa* (Savile 1965) have conidia that are reportedly continuous (aseptate). The Korean isolates had conidia that were multi-septate, with (2-) 3-7 septae (Shin & Sameva 1999, Shin & Sameva 2004). The Korean isolates appear to be morphologically distinct and may constitute an unnamed new species. Further studies are required to clarify the taxonomic status of the Korean isolates before the *Septoria* causing Korean brown leaf spot can safely be assumed to be identical with the *Septoria oenanthes* already present in the United States.

## **Nomenclature Report**

# Septoria oenanthes Ellis & Everh. 1894 (Ascomycetes, Mycosphaerellales)

Variant spelling Septoria oenanthis Ellis & Everh. 1894 Note: Original spelling.

[= Septoria oenanthis Picb. 1937 - illegitimate later homonym, not included in search] Note: Illegitimate later homonym, listed by Brandenburger (1985) as a possible synonym of Septoria

oenanthes Ellis & Everh. 1894.

[Septoria oenanthis-stoloniferae Sawada 1943] Note: Invalid name, no Latin description, only in Japanese (Art. 36.1).

**Notes:** Initially published as *Septoria oenanthis* by Ellis & Everhart (1894), with spelling later corrected to *Septoria oenanthes*. Petrak's List 8:102 reported publication of the illegitimate later homonym *Septoria oenanthis* Picbauer 1937, on *Oenanthe aquatica* in Czechoslovakia. Picbauer's publication is not in the SBML library, therefore we could not confirm whether this name was validly published. In 1943 Sawada published the name *Septoria oenanthis-stoloniferae* but did not provide a Latin description, therefore the name was not validly published. Based on the description, Sawada's isolate is similar to *Septoria oenanthes* Ellis & Everhart. Korean isolates (Shin 1999, Shin 2004) are reportedly morphologically distinct from North American and European isolates, with longer, multiseptate conidia; their taxonomic status should be reevaluated.

**Distribution:** Asia (Korea, Taiwan, USSR, Teterevnikova-Babayan 1987)), Europe (UK, Germany (Petersen et al. 2002), Portugal), North America (Canada, USA: WA, type).

**Substrate:** Leaves.

Disease Note: Leaf spot.

Host: Oenanthe spp. (Apiaceae).

**Internal Note:** Spelling corrected: Oenanthe from Greek? First declension (like Aloe) genitive singular Oenanthes, see Stearne p. 68.

#### **Supporting Literature:**

Brandenburger, W. 1985. Parasitische Pilze an Gefaerrspflanzen in Europe. Gustav Fischer Verlag, New York, 1248 pages.

de Sousa Dias, M.R., Lucas, M.T., and Lopes, M.C. 1982. Fungi Lusitaniae XXIX. Agron. Lusit. 41: 175-192.

**Dennis, R.W.G.** 1986. Fungi of the Hebrides. Royal Botanic Gardens, Kew. 383 pages.

Grove, W.B. 1935. British Stem- and Leaf-Fungi (Coelomycetes) Vol. 1. Cambridge Univ. Press, Cambridge, 488 pages.

Petersen, J., Winter-Huneck, B., and Ruge, U. 2002. Naturschutz im Land Sachsen-Anhalt. Landesamt fuer Umweltschutz Sachsen-Anhalt, Halle, Germany, 368 pages.

Savile, D.B.O. 1965. Some fungal parasites of umbelliferae. Canad. J. Bot. 43: 571-596.

Sawada, K. 1943. Descriptive catalogue of the Formosan fungi. Part VIII. Rep. Dept. Agric. Gov. Res. Inst. Formosa 85: 1-130.

Shin, H.D., and Sameva, E.F. 1999. Taxonomic notes on the genus Septoria in Korea (I). Mycotaxon 73: 215-233.

Shin, H.D., and Sameva, E.F. 2004. Septoria in Korea. National Institute of Agricultural Science and Technology, Suwon, Korea, 183 pages.

Teterevnikova-Babayan, D.N. 1987. [Fungi of the genus *Septoria* in the USSR]. Akademiya Nauk Armyanskoi SSR, Yerevan, 478 pages.

Verified By: Erica On Jun 21, 2006

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Written by Erica Cline, 2006